



A Preliminary Investigation of the Psychometric Properties of the Acceptance and Action Questionnaire-II and Engaged Living Scale among Ethnically Diverse College Students in Hawai'i

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While not an exact replication of previous findings, this study provides theory-consistent psychometric support for the AAQ-II and ELS in an ethnically diverse sample in Hawai'i.

Introduction

Contextual cognitive behavioral researchers have proposed an overarching tripartite model of behavior change and optimal health including the promotion of **centered**, **open**, and **engaged** response styles^{1,2}

The constructs of **psychological inflexibility** and **engaged living** are often used to conceptualize these response styles. The Acceptance and Action Questionnaire-II (AAQ-II)³ and Engaged Living Scale (ELS)⁴ are two measures commonly used to operationalize these constructs:

- **AAQ-II:** unidimensional measure of psychological inflexibility/experiential avoidance³
- **ELS:** measure of engaged living with two facets- *valued living* and *life fulfillment*⁴

Conditional nature of psychometric properties of self-report measures and importance of cross-cultural generalizability of instruments⁵

The present study examined the psychometric properties of the AAQ-II and ELS in ethnically diverse college students in Hawai'i

Method

Participants included N = 422 undergraduate students (M age = 20.6; 67% female) from a large public university in Hawai'i. The three largest ethnic groups were:

- Asians (37.4%)
- Biracial/multicultural (25.6%)
- White (non-Hispanic) (22.8%)

A series of exploratory factor analyses (EFA) and confirmatory factor analyses (CFA) were conducted using Mplus to examine factor structure and inter-factor correlations; internal consistency was also calculated.

Acceptable cutoff for RMSEA < 0.07, CFI > 0.95.

Results

AAQ-II: Initial 1-factor CFA and subsequent EFAs indicated poor model fit, but exploratory structural equation modeling indicated 3-factor model was a good fit (RMSEA = .04, CFI = 1.00)

Item No.	Acceptance and Action Questionnaire-II: Exploratory Structural Equation Model	Factor 1 Fear of Feelings	Factor 2 Life Interrupted	Factor 3 Entangled with Worries
2	I'm afraid of my feelings.	.878		
1	My painful experiences and memories make it difficult for me to live a life that I would value.		.819	
4	My painful memories prevent me from having a fulfilling life.		1.033	
3	I worry about not being able to control my worries and feelings.			.501
5	Emotions cause problems in my life.			.782
6	It seems like most people are handling their lives better than I am.			.928
7	Worries get in the way of my success.			.979

ELS: Initial 2-factor CFA indicated poor model fit, but EFA indicated 4-factor model retaining 11/16 original items was an acceptable fit (RMSEA = .07, CFI = 0.99)

Item No.	Engaged Living Scale Exploratory Factor Analysis	Factor 1 Recognizing Value	Factor 2 Clarity in Life Direction	Factor 3 Value-Action Congruence	Factor 4 Life Fulfillment
1	I have values that give my life more meaning.	.921			
2	I know what motivates me in life.	.594			
3	I believe that I've found important values to live according to.	.925			
4	I know exactly what I want to do with my life.		.841		
6	I know how I want to live my life.		.426		
7	I know what I want to do with my life.		1.021		
9	I believe that how I behave fits in with my personal wants and desires.			.650	
10	My emotions don't hold me back from doing what's important to me.			.523	
12	I am satisfied with how I live my life.				.707
14	I believe that I am living life to the full right now.				.958
16	I feel that I am living a full life.				.914

Discussion

- Results indicated good **reliability** overall: α & ω = .89 to .92 for the AAQ-II and from .71 to .92 for the ELS
- Convergent and divergent **validity** also supported with inter-factor correlations among ELS and AAQ-II factors (higher inter-factor r 's and lower/negative inter-scale r 's)
- **Factor structure of AAQ-II** diverged from previous research³, yet the 3-factor model presented here is consistent with the psychological flexibility model^{6,7}
- **Factor structure of ELS** also diverged from previous research⁴, but 4-factor model presented here corroborates contextual CBT model of behavior change and optimal health¹¹, including values-based living in ACT⁸
- This study highlights the importance of considering the unique **cultural context** in which measures are originally developed and where they're subsequently normed given the **potential instability of psychometric properties**⁹
- **Limitations:** non-clinical sample, same sample used for EFAs and CFAs, and differences in ethnicity of valid vs. invalid responses
- **Future research** should further investigate the relationship between ELS, AAQ-II, and other novel measures of contextual CBT processes, such as the Multidimensional Psychological Flexibility Inventory¹⁰ and the Multidimensional Experiential Avoidance Questionnaire¹¹

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